(c) Springs or surface runoff across a beach. Figure III-5-4 shows springs near the waterline along the beach in Ghana which result from groundwater flow over the impervious underlying clay and peat sediments. In this case, the groundwater flow gradient is driven by the presence of an enclosed lagoon with water levels higher than mean sea levels on the other side of the washover terrace.

Figure III-5-4. Springs flowing over the beach surface along the Keta shoreline in Ghana, West Africa, September 1996

(d) Discoloration of water in the nearshore zone. Along eroding bluff shorelines, the water takes on the color of the bluff sediment in response to wave attack. Figure III-5-5 shows discoloration of the seawater near the shoreline caused by erosion of underlying lagoon sediments along the Ghana shoreline. At this location, this was the first evidence that easily erodible cohesive sediments existed in the nearshore zone.

(e) Permanent undulations in the shoreline planform may also signify the presence of cohesive or consolidated sediments in the nearshore zone with alongshore variability in erosion resistance. These features are best identified through oblique or overhead aerial photographs. An example along the Ghana